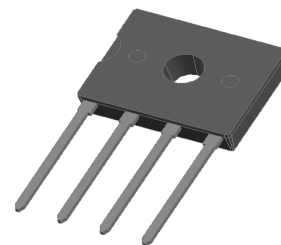


Bridge Rectifiers

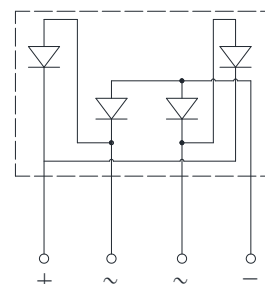
Features

- UL recognition, file #E230084
- Ideal for printed circuit boards
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106



Typical Applications

General purpose use in AC/DC bridge full wave rectification for monitor, TV, printer, power supply, switching mode power supply, adapter, audio equipment, and home appliances applications.



Mechanical Data

- **Package:** D3K
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body

■ Maximum Ratings ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	D4UB05A	D4UB10A	D4UB20A	D4UB40A	D4UB60A	D4UB80A	D4UB100A
Device marking code			D4UB05A	D4UB10A	D4UB20A	D4UB40A	D4UB60A	D4UB80A	D4UB100A
Repetitive peak reverse voltage	VRRM	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load	With heatsink $T_c=140^\circ\text{C}$	IO	A	4.0					
	Without heatsink $T_a=29^\circ\text{C}$			1.3					
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, $T_j=25^\circ\text{C}$	IFSM	A	135						
Current squared time @ $1\text{ms} \leq t \leq 8.3\text{ms}$ $T_j=25^\circ\text{C}$, Rating of per diode	I^2t	A^2s	75						
Storage temperature	Tstg	$^\circ\text{C}$	-55 ~+150						
Junction temperature	T_j	$^\circ\text{C}$	-55 ~+150						
Dielectric strength @ Terminals to case, AC 1 minute	Vdis	KV	2						
Mounting torque @ Recommend torque: 5kg · cm	Tor	kg · cm	8						

■ Electrical Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	D4UB05A	D4UB10A	D4UB20A	D4UB40A	D4UB60A	D4UB80A	D4UB100A
Maximum instantaneous forward voltage drop per diode	V _F	V	IFM=2.0A	1.00						
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM}	μA	V _{RM} =V _{RRM}	5						

■ **Thermal Characteristics** ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	D4UB05A	D4UB10A	D4UB20A	D4UB40A	D4UB60A	D4UB80A	D4UB100A
Thermal resistance	Between junction and ambient, Without heatsink	$R_{\theta J-A}$	$^\circ\text{C/W}$	55.0						
	Between junction and case, With heatsink	$R_{\theta J-C}$		1.5						

■ **Ordering Information** (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
D4UB05A -D4UB100A	B1	Approximate 1.266	25	1500	6000	TUBE

■ **Characteristics** (Typical)

FIG1: I_o - T_c Curve

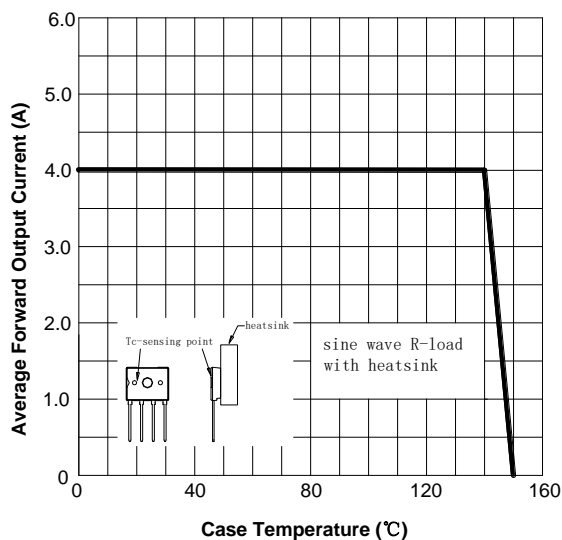


FIG2: Surge Forward Current Capability

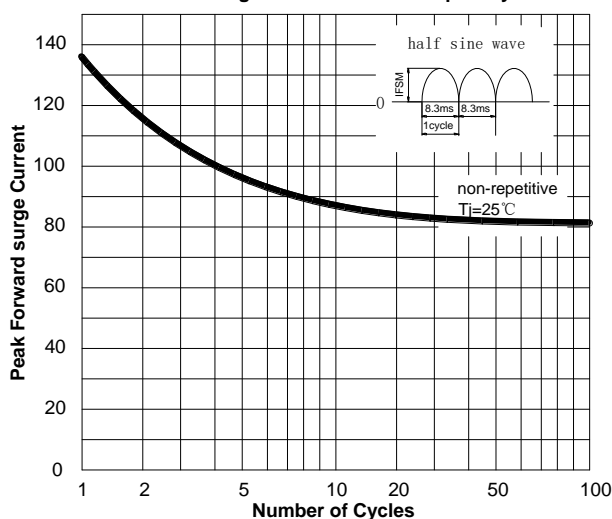


FIG3: Forward Voltage

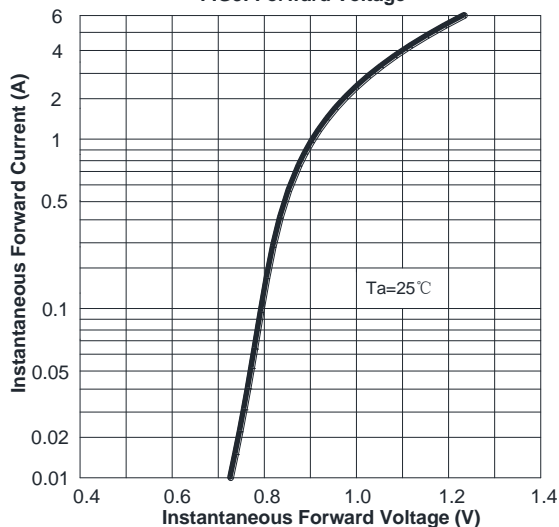
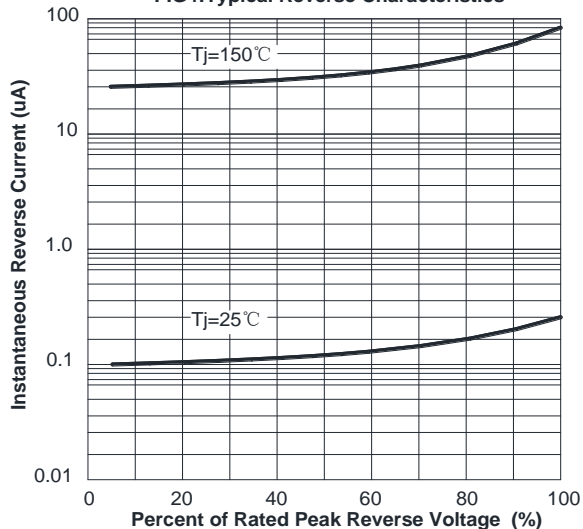
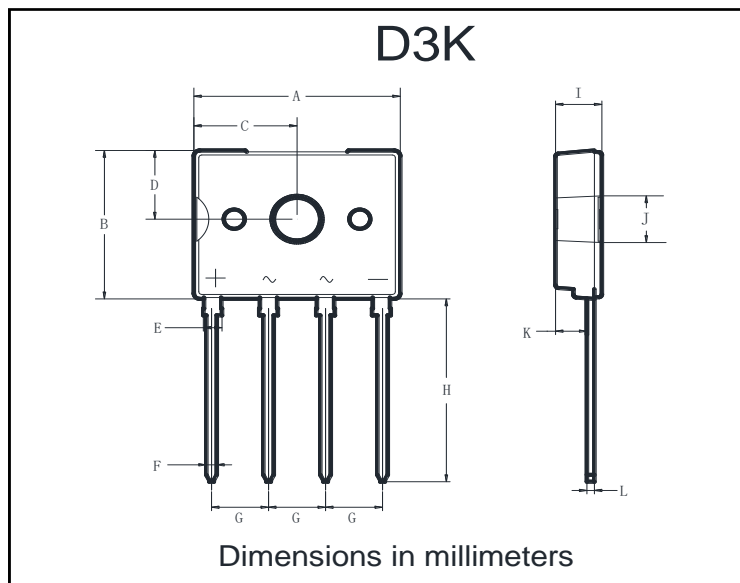


FIG4: Typical Reverse Characteristics



■ Outline Dimensions



D3K		
Dim	Min	Max
A	13.30	14.30
B	10.30	11.30
C	6.40	7.40
D	4.50	5.50
E	1.05	1.45
F	0.60	0.85
G	3.70	3.90
H	13.10	13.50
I	2.60	3.60
J	3.10	3.40
K	2.00	2.20
L	0.40	0.60

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